

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) An electrochemical sensor for subcutaneous glucose sensing, the sensor comprising:

a body having a top layer impervious to glucose and a base layer impervious to glucose;
a working electrode positioned between the top layer and the base layer; and
an analyte-responsive sensing layer comprising glucose oxidase and a redox polymer proximate the working electrode; and
a channel extending through the top layer to at least the working electrode and the sensing layer, the sensing layer exposed for contact with glucose via the channel the analyte only at an edge of the sensor, wherein the a sensor signal is limited, at least in part, by mass transport of analyte to the sensing layer[[:]]
~~wherein the sensor is configured and arranged for implantation into the body of a mammal for contact with body fluid of the mammal.~~

- 2-41. (canceled)

42. (new) The electrochemical of claim 1, wherein the channel is defined by a small hole in the top layer.

43. (new) The electrochemical of claim 1, wherein the channel extends through the top layer and through the base layer.

44. (new) The electrochemical of claim 43, wherein the channel is defined by a first small hole in the top layer and a second small hole in the base layer.

45. (new) The electrochemical of claim 44, wherein body is planar.

46. (new) The electrochemical sensor of claim 1, wherein the sensing layer is less than 100 μm thick.
47. (new) The electrochemical sensor of claim 46, wherein the sensing layer is in the range of 1 to 10 μm thick.
48. (new) The electrochemical sensor of claim 1, wherein the sensing layer further comprises a cross-linker.
49. (new) The electrochemical sensor of claim 1, wherein the sensor body is flexible.
50. (new) The electrochemical sensor of claim 1, wherein the sensing layer is non-leachably disposed on the sensor.